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Article

Canadian report card on health equity across the life-course: Analysis of time trends and cross-national comparisons with the United Kingdom

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ABSTRACT

Addressing social determinants of health (SDoH) has been acknowledged as an essential objective for the promotion of both population health and health equity. Extant literature has identified seven potential areas of investment to address SDoH: investments in sexual and reproductive health and family planning, early learning and child care, education, universal health care, as well as investments to reduce child poverty, ensure sustainable economic development, and control health hazards. The aim of this paper is to produce a 'report card' on Canada's success in reducing socioeconomic and health inequities pertaining to these seven policy domains, and to assess how Canadian trends compare to those in the United Kingdom (UK), a country with a similar health and welfare system. Summarising evidence from published studies and national statistics, we found that Canada's best successes were in reducing socioeconomic inequalities in early learning and child care and reproductive health—specifically in improving equity in maternal employment and infant mortality. Comparative data suggest that Canada's outcomes in the latter areas were like those in the UK. In contrast, Canada's least promising equity outcomes were in relation to health hazard control (specifically, tobacco) and child poverty. Though Canada and the UK observed similar inequities in smoking, Canada's slow upward trend in child poverty prevalence is distinct from the UK's small but steady reduction of child poverty. This divergence from the UK's trends indicates that alternative investment types and levels may be needed in Canada to achieve similar outcomes to those in the UK.

1. Introduction

Socioeconomic inequalities in health are known to result from societal socioeconomic inequalities—experienced even before birth and accumulated throughout life (Marmot et al., 2010). With the aim of improving both health and well-being for all, and reducing health inequities, extant reports on the Social Determinants of Health (Marmot et al., 2008; Marmot et al., 2010; Wilkinson & Marmot, 2003) have identified several areas of investment (Frank et al., 2015). These can be summarized into seven domains: 1) sexual and reproductive health, family planning, and pre- and perinatal care, 2) labour market and tax policies to reduce child poverty, 3) early childhood education and care, 4) secondary and post-secondary education, 5) accessible and high-quality primary, secondary, and tertiary health care, 6) economic and marketing controls on health hazards, and 7) sustainable economic development to support meaningful employment. Though many of these areas overlap, and alternative classification systems can be used, this broad taxonomic classification of investment areas offers a valuable framework to guide the study and interpretation of health equity-related outcomes. These investment areas were identified as priorities for

Abbreviations: ECEC, Early childhood education and child care; CANSIM, Canadian Socio-Economic Information Management System; CCS, Canadian Cancer Society; CIHI, Canadian Institute for Health Information; GDP, Gross domestic product; OECD, Organisation for Economic Co-operation and Development; ONS, Office for National Statistics; SDoH, Social determinants of health; UK, United Kingdom; WHO, World Health Organization

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their ability to shift distributions of exposure to known social determinants of health, and to maximise individual and community potential throughout all stages of life course (Marmot et al., 2010). By reducing social disparities in early developmental opportunities, standards of living, employment, and health care (Marmot et al., 2010), investment in these seven areas has been proposed to help reduce health inequities.

In 2015, a study by Frank et al. assessed how Scotland versus the rest of the United Kingdom (UK) 'stacked up' in terms of their implementation of these recommendations, as indicated by their respective national trends in health and socioeconomic outcomes (Frank et al., 2015). In recent history, Scotland had seen consistently higher levels of infant mortality (Palmer, 2010) and lower life expectancy (Kyte & Gordon, 2009) than the rest of the UK. In their study, Frank et al. found that Scotland had seen slightly greater reductions in child poverty compared to Wales and England in recent years, but lagged in achieving greater equity in relation to teenage pregnancy, early childhood education, educational attainment, employment, healthcare access, consumption of harmful food and drink, and gambling (Frank et al., 2015). A similar analysis has not yet been conducted for Canada.

Canada—like the UK—is considered a "liberal" welfare state (Esping-Andersen, 1990). Its delivery of social services draws from a protestant liberal tradition, and is marked by both high universal social insurance coverage (i.e. for sickness, unemployment, etc.) and high benefit differentials (i.e. benefits that are distributed unevenly in the population) (Van der Veen & Van der Brug, 2013). Canada's universalist tradition is aligned in both theory and practice with values of equality and justice (Romanow, 2002), both of which underpin the Social Determinants of Health framework (Wilkinson & Marmot, 2003). However, since the 1970s, the country has been exposed to the policy paradigm of neoliberalism (Siddiqi, Kawachi, Keating, & Hertzman, 2013)—observed most recently through several periods of fiscally conservative leadership. Between 2006 and 2015, spending cutbacks occurred in housing, education, and social assistance programs—all of which are essential policy areas for the improvement of social determinants of health and health equity (Ruckert, 2012). Given the variability of political and moral frameworks that have guided policy and legislation in Canada over recent decades, it is useful to look at trends in equity outcomes across the seven areas of investment identified. The aim of this paper is to produce a 'report card' on Canada's success in reducing inequities pertaining to the seven policy domains listed above, and wherever possible, to compare Canadian trends to those in the UK in order to benchmark Canada's achievements in health equity against those in another liberal welfare state—one for which previous equity trend analyses have been performed. Identifying areas where Canada lags may help inform future research, policy and/or investments in the country. Further, differences between the two nations can highlight future areas for cross-national analysis of health and social policies, contexts, and interventions, and their differential impacts on health equity (Gilson, 2012).

2. Approach

This article summarises evidence from published studies, national reports and publicly-available summary statistics on health inequities in Canada and their determinants, and where possible, contrasts these trends with those observed in the UK. Data were identified through searches of Statistics Canada, Canadian Institute for Health Information (CIHI), Office for National Statistics (ONS), UK Government, and Organisation for Economic Co-operation and Development (OECD) web-based databases, as well as PubMed (for summary trend statistics in peer-reviewed publications). Snowball searches based on the reference lists of relevant peer-reviewed and grey-literature publications were also conducted to fill data gaps.

Instead of aiming to quantify Canada's monetary investments in the seven areas identified (which can be very challenging when systems of national accounts vary across countries, as in this case), we focus on measurable outcomes related to socioeconomic inequities in these seven areas. To produce a summary 'report card' of trends in health equity-related outcomes in Canada the UK, we aim to summarize two features: the size of the change in the inequity through time ("Equity trend") and the size of the remaining inequity at the latest data point ("Equity burden size"). Equity trend scores ranged from "Poor" to "Excellent" depending if the inequality increased, stayed stable, or decreased through time, whereas equity burden size scores ranged from "Poor" to "Excellent" if large versus very small/unsubstantial inequities remained. An average of these two scores was estimated. If the country's two individual scores were consecutive in ordering (e.g. "Good" and "Excellent") the lowest of two scores was up-weighted for more conservative estimation of "average" scores (i.e. the average between "Good" and "Excellent" scores would be "Good"). Used primarily to facilitate knowledge synthesis, the precision of these scores should be interpreted cautiously.

As with previous work (Frank et al., 2015), this study argues that socioeconomic inequities in these seven outcome categories are likely to be reduced following appropriate equity-oriented policy and program investments. We interpret trends in socioeconomic inequities in the seven areas as makers of potential success or failure of investments made. Focusing on trends at a national level in Canada, rather than at a provincial level, allows us to both capture how the sum of investments across provincial and federal jurisdictions influences average national outcomes, and to compare Canadian findings with those of other countries.

3. Equity trends: Seven key investments to improve health equity

3.1. Sexual and reproductive health, family planning, and pre- and perinatal care

Sexual and reproductive health, family planning, and pre- and perinatal care are grouped here given their common ties to gender empowerment, and to intra-uterine, infant and child development. Family planning services are associated with fewer unintended pregnancies, and positive effects for the health and survival of the birthing individual (a term used here to be inclusive of transgender and non-binary individuals designated female at birth (Goldberg, Harbin, & Campbell, 2011)) and the child, as well as household poverty alleviation (Singh, Darroch, Ashford, & Vlassoff, 2009). Pre- and peri-natal care are also associated with improvements in child survival and birthing individuals' health (Bryce, Black, & Victora, 2013). In turn, fetal and early childhood development influence later-life outcomes—particularly cardiovascular, respiratory, and endocrine health outcomes (Wilkinson & Marmot, 2003). Socioeconomic inequities in early life therefore tend to translate into inequities in health throughout the life-course (Kuh, Ben-Shlomo, Lynch, Hallqvist, & Power, 2003).

Equity trends in reproductive health and care can be assessed through several proxies. Here we focus on infant mortality. Despite large decreases in infant mortality overall and across income groups between 1971 and 2001 in Canada (PHAC, 2008; Wilkins, 2007), rates have plateaued since and absolute income-based inequalities in infant mortality remain stable, but very small (Fig. 1). (CIHI, 2016b). When considering inequalities according to area-level social and material deprivation, there were on average 5.3 infant deaths per 1000 live births in the most deprived areas compared to 3.6 deaths/1000 in the least deprived areas between 2008 and 2011 (PHAC, 2018) (Fig. 2). No extant studies, reports, or statistics from the UK offered comparable data on trends in infant mortality according to area-level income, specifically. However, available data on infant mortality according to area-level deprivation between 2008 and 2011 suggest that the UK also observed a small remaining inequality between most- and least-deprived areas (ONS, 2016a) (Fig. 2). Though the UK's area-level Index of Multiple Deprivation (IMD) uses a much wider range of factors